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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,611	03/09/2004	Toshiaki Shiroaska	D3301-00133	1762
8933	7590	03/06/2006	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			CAO, HUEDUNG X	
			ART UNIT	PAPER NUMBER
			2821	

DATE MAILED: 03/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/796,611	SHIROSAKA ET AL.
Examiner	Art Unit	
Huedung X. Cao	2821	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 13 December 2005.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-5 is/are rejected.

7)  Claim(s) 6-7 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner. 1

10)  The drawing(s) filed on 09 March 2004 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. 10/756,216.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by SUGAWARA et al. (US 4926187).

As per claim 1, Sugawara teaches “a signal receiving system” comprising :

a variable directivity antenna having its directivity varied in accordance with a control signal applied thereto (Sugawara, figure 3b);

a control signal generator for generating said control signal (Sugawara, figure 6, signal generator 3);

a modulator for modulating a carrier with said control signal from said control signal generator to develop a modulated signal (Sugawara, figure 3b, figure 6, and column 7, lines 8-57, column 10, lines 24-55); and

a controller for demodulating said modulated signal to recover said control signal from said modulated signal and applying said recovered control signal to said variable directivity antenna to thereby vary the directivity of said variable directivity antenna (Sugawara, figure 3b, figure 6, and column 6, lines 8-13, column 7, lines 8-57, column 10, lines 24-55).

Claim 2 adds into claim 1 wherein said modulator ASK modulates said carrier with said control signal (Sugawara, column 7, lines 19-57).

Claim 3 adds into claim 1, wherein said variable directivity antenna is coupled to a receiving apparatus through a transmission line, and said receiving apparatus includes therein said modulator and said control signal generator, said transmission line transmitting a signal received by said variable directivity antenna to said receiving apparatus and transmitting said modulated signal from said receiving apparatus to said variable directivity antenna (Sugawara, figure 3b, and column 7, lines 8-57).

Claim 4 adds into claim 1 wherein said variable directivity antenna is coupled to a receiving apparatus through a transmission line, and said modulator is external to said receiving apparatus, said transmission line transmitting a signal received by said variable directivity antenna to said receiving apparatus and transmitting said modulated signal from said modulator to said variable directivity antenna (Sugawara, figure 3b, and column 7, lines 8-57).

Claim 5 adds into claim 1 wherein said variable directivity antenna is adapted to receive a signal received by a separate antenna, and is provided with combining means for combining said signal received by said separate antenna with a signal received by said variable directivity antenna, an output signal of said combining means being coupled to a receiving apparatus through a transmission line signal (Sugawara, figure 6, and column 10, lines 24-55).

***Allowable Subject Matter***

3. Claims 6-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Prior art fails to teach that two directional antennas disposed in such a manner that their directivities can be orthogonal to each other; and two level adjusting means to which signals received by respective ones of said two directional antennas are applied, respectively; said level adjusting means being controlled with said control signal; and the variable directivity antenna coupled to a receiving apparatus through a transmission line; and said receiving apparatus comprises: signal receiving condition detecting means for detecting a condition in which a desired signal is being received; and receiving apparatus control means for, when the signal receiving condition becomes unacceptable, changing said control signal to be supplied to said modulator from said control signal generator, and providing, to said modulator, the current control signal being supplied when the signal receiving condition as detected by said signal receiving condition detecting means becomes acceptable.

***Response to Arguments***

4      Applicant's arguments filed 12/13/05 have been fully considered but they are not persuasive.

Applicant argues that does not teach a variable directivity antenna to thereby vary the directivity which is not correct. Sugawara does teach that in column 6, lines 8-15, Furthermore, applicant argues that in column 7, lines 19-57 Sugawara teaches the directivity does not change. However, nowhere in that paragraph is talked about the directivity doesn't change. Therefore, the 35 USC 102 rejection to claims 1-5 stand.

***Inquiries***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huedung Cao whose telephone number is (571) 272-1939.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huedung Cao  
Patent Examiner



DON WONG  
SUPERVISORY PATENT EXAMINER